INDIAN BUREAU OF MINES MINERALS DEVELOPMEMT AND REGULATION DIVISION MCDR INSPECTION REPORT BHUBANESWAR REGIONAL OFFICE

General:

SL. No.	Particulars	Details
1	Name of the Mine	Jaribahal Iron Ore Mines
2	Date of inspection	14-03-2024
3	Name of inspecting officer	Prashant S Hegde, RMG
4	Name accompanying mine	S/Shri D.N Parida, Mines Agent, Prafulla Kumar Parida, DGM(Geology), S.K. Panda,
	officials	Mines Manager, S.K. Prusty, Mining Engineer,
		Pritam Keshari Patra, Geologist and other mine
		officials.
5	Last data of Improstion 9 Officer	22/10/2022
5	Last date of Inspection & Officer	Shri R.K.Das, DCOM
6	Total Loaco Aroa (Ha) with broakup	107.44 Ha. (99.679 Ha Forest + 7.761 Ha Non-
0	Total Lease Area (Ha) with breakup of Non-forest and forest land	forest)
7	Minecode	30ORI08120
8		IBM/7805/2011
0	IBM Registration Number under rule 45 of MCDR, 2017	IBM//005/2011
9	Name of the lessee, Address,	M/s Kashvi International Pvt. Ltd.
	phone, email and fax number	1234/P Govind Prasad, Bomikhal, Rasulgarh,
		Bhubaneswar
		State-Odisha, Pin code-751010
		Phone No- 06742549944
		Fax No- 06742549944
		Email- groupkashvi@gmail.com
10	Village	Jaribahal
11	Taluka/Mandal	Barbil
12	District	Keonjhar
13	Pincode	758034
14	State	Odisha
15	Post office	Bamebari
16	Nearest police station	Bamberi
17	Nearest Railway station	Jaroli
18	Date of Grant of Mining Lease	29.06.2020
19	Date of Execution	29.06.2020
20	Date of opening of Mine	25.07.2020
21	Date of expiry	28.06.2070
22	Name of the Nominated Owner with	Mr. Debabrata Behera
	Address, phone, email, fax number	Managing Director
	and date of appointment	M/s Kashvi International Pvt. Ltd.
		1234/P Govind Prasad, Bomikhal, Rasulgarh,
		Bhubaneswar
		State-Odisha, Pin code-751010
		Phone No- 06742549944
		Fax No- 06742549944
22	Name of the Mine Agent - ith	Email- groupkashvi@gmail.com Shri D.N. Parida
23	Name of the Mine Agent with	At/Po: Baneikala, Joda
	Address, phone, email, fax number	Dist-Keonjhar, Pin-758034
	and date of appointment	אוון אוויייטטט 1751-זיטט 1751-זיטט 1751-זיטט 1751-זיטט 1751-זיטט

		State-Odisha Mobile No: 6371160044
D.4	27 6.1 25. 25	Date Of Apointment-07.09.2020
24	Name of the Mines Manager with	Shri S.K. Panda
	Address, mobile no, email, fax	(AMIE)-Mining
	number and date of appointment in	At- Ward No-03
	mine	Po- Joda
		Dist- Keonjhar
		Odisha,
		Phone No- 9437355832
		Email- suryakantapanda1970@gmail.com
		Date of Appointment – 15.07.2020
25	Name of the Mining Engineer ,	Shri Sanjaya kumar Prusty
	Qualification and total experience	(AMIE)-Mining
	with Address, mobile no, email,	At/Po - Anal
	fax/phone number and date of	Via - Mathakargola
	appointment in mine	Dist -Dhenkanal
		Odisha,759024
		Ph. No 8480903138
		Email- skprusty041@gmail.com
		Total Experience-12years
		Date Of Apointment-16.08.2020
26	Name of the Geologist , Qualification	Shri Pritam Keshari Patra
	and total experience with Address,	M.Sc (Geology),
	mobile no, email, fax number and	At-Badahal
	date of appointment in mine	Po- Keonjhar town
	dute of appointment in inine	Dist- Keonjhar
		Odisha,758001
		Ph. No9437214696
		Email- pritam4696@gmail.com
		year of experience-17years
		Date Of Apointment-03.09.2020
27	Date of Approval of Mining	
27	Date of Approval of Mining	(1)Approval of Mining Plan No. MP/A/19-ORI/
	Plan/Review of Mining Plan/ their	BHU/2020-21 dated 05.11.2020 (2020-21 to
	modifications with five-year period	2024-25)
	and specific condition in approval	(2)Modifications of Mining Plan approved vide
	letter, if any.	letter no-MCDR-MiFL0FE/6/2022-BBS-
		IBM_RO_BBS dt. 19.04.2023 (2023-24 to
		2024-25)
28	Mineral (s) granted in lease and	Iron ore
	proved for mining	TIOH OF
29	Method of Mining(Opencast,	0
	Underground)	Opencast
30	Category (Fully Mechanised, Others	
	or Manual)	Fully Mechanized
	/	
31	Captive/Non Captive	Captive

OBSERVATIONS/COMMENTS OF INSPECTING OFFICER:

1)Exploration:---

SL.No	Item	Proposals	Actual work	Remarks
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		(FY 2022-23)			
1a	Backlog of previous year	2022-23: NIL	2022-23: 13		
		23-24: 19 nos of	Nos of BHs (8		
		non-core BHs	nos Core+5 nos		
		with 950 total	Non-Core) with		
		meterage+ 3 nos	817 total		
		of Core BHs	meterage.		
		with 180 metage	2023-24: 7 nos		
			non-core BHs		
			drilled so for		
			and remaining		
_	_		under progress.		
1b	Exploration over lease area	Proposals of	G1-69.88 Ha		
	for Geological axis 1 or 2.	conversion of G-	G2-37.56 Ha		
		2 to G-1	120 2 111		
1c	Exploration Agency &	NIL	APC Drilling &		
	Expenditure in lakh Rupees		Construction		
	during the year		Pvt. Ltd.,		
			Gemco kati		
			Exploration Pvt. Ltd.		
			Expenditure:		
			53.41 Lakhs.		
1d	Balance area to be explored	NA	G2-37.56 Ha;		
1 u	to bring Geological axis in	1111	Conversion of		
	1 or 2		G-2 to G-1		
	1 01 =		proposed at		
			Modified MP		
			dated		
			19.04.2023.		
1e	Balance reserves as on	NA	Iron Ore (+45 %	Based on approved	
	01.04.2023		Fe) reserves:	modified MP dated	
			111: 4,974,555	19.04.2023 &	
			tonnes	subsequent depletion	
			(Average Grade		
			54.79 % Fe)		
1f:	General remarks of			art of the Singhbhum-	
	inspecting Officer on		•	cupies a south central	
	Geology, exploration etc.	position on the eastern limb of the synclinorium. The main			
		rock types found in this mine are Laterite, Lateritic iron			
		ore, Hematite (Laminated, blue dust), BHJ/BHQ. Based on			
		•	•	ore body as follows.	
		Iron ore: 550m X 8	35m X 45m (Avera	ge Grade 54.79 % Fe)	

2)Development:--

SL.	Item	Proposals (FY 2022-23)	Actual work	Remarks
No.				
2a	Location of	Quarry-1&2, Quarry-5,	Developments at Quarry-1&2,	NIL
	developme	Quarry-6, Quarry-9	Quarry-5 only. Subsequently	
	nt w.r.t.	(i.e. North-Central, Central	MP modified on 19.04.2023 as	
	lease area	and south-central parts of ML	Quarry nos. 6 & 9 found to be	
		i.e. Sections: $X_{10}Y_{10}$, X_8Y_8 ,	barren.	
		$X_7Y_7 X_6Y_6$, X_5Y_5 , X_4Y_4 , and		

		X ₃ Y ₃ ;) (N215530.40-N215456.92 &E-852435.97-E852458.16)		
2b	Separate benches in topsoil, overburden and mineral	Separate benches in overburden and minerals; No top-soil generation;	Broadly as per proposals.	
2c	Stripping ratio or ore to OB ratio	1: 0.319	1: 5.55 Subsequently MP modified on 19.04.2023	Ratio in T:T &BD:2
2d	Quantity of topsoil generation in m3	No proposals	Nil	
2e	Quantity of overburden generation in m3	159,100 m3	2,767,669.7 m ³ Subsequently MP modified on 19.04.2023	Due to narrow /pocket/irre gular nature of ore body occurrence at some of locations.
2f	General remarks of inspecting Officer on developme nt of pit w.r.t. type of deposit etc	2022-23 due to narrow /pocke some of locations and Quarry no	carried as per the approved MP t/irregular nature of ore body or os. 6 & 9 found to be barren. Substesently developments are being carries.	ccurrence at equently MP

3)Exploitation:--

0/=NP:0				
SL.No.	Item	Proposals (FY 2022-23)	Actual work	Remarks
3a	Number of pits proposed for production	Quarry-1&2, Quarry-5, Quarry-6, Quarry-9 (Five nos of pits)	Quarry-1&2, Quarry-5 only. Subsequently MP modified on 19.04.2023 as Quarry nos. 6 & 9 found to be barren.	NIL
3b	Quantity of ROM mineral production proposed	998,000 Tonnes	997,550 Tonnes	
3c	Recovery of salable/usab le mineral from ROM	50.4 % (503578 Tonnes)	19.6% (196116 Tonnes) Subsequently, MP modified on 19.04.2023 with no MR	+55 % Fe

	production		and + 45% Fe utilization.	
3d	Quantity of mineral reject generation	494,442 Tonnes	785,238 Tonnes Subsequently, MP modified on 19.04.2023 with no MR and +45 % Fe ore utilization.	
3e	Grade of mineral reject generation and threshold value declared	MR: 45 to 55 % Fe	MR: 45 to 55 % Fe	Threshold value of Iron Ore: +45 % Fe
3f	Quantity of sub-grade mineral generation	Same as para 3d		Sub-grade mineral/ mineral reject are being
3g	Grade of sub-grade mineral generation	Same as para 3e		stacked separately & utilized by blending as per the market demand &captive consumption.
3h	Manual / Mechanised method adopted for segregating from ROM	Mechanized	Mechanized	
3i	Any analysis or beneficiatio n study proposed & carried out for sub- grade mineral and reject	Nil	NIL	
3j	Provision of drilling & blasting in mineral benches	Deep Whole drilling with controlled type of blasting with depth 6.6m, spacing up to 2.5m & burden 2m.	Presently Deep Hole drilling with controlled type of blasting and depth of drilling 9.9m, spacing up to 2.5m & burden 2m Subsequently, MP modified on 19.04.2023.	Drilling with 100-115 mm diameter.
3k	Provision of mining machineries	Yes, mining by Excavators & Dumpers Combination.	As per proposals.	

	in mineral					
31	benches Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	6m bench heiş width		15 m wide subsequently, modified 19.04.2023.		
3m	Total area covered under excavation/ pits	66.204 (end of pla		48.31 Ha		
3n	Ore to OB ratio for the pit/mine during the year	1: 0.319		1: 5.55 Subsequently on 19.04.202	MP modified 3	Ratio in T:T &BD:2
30	Total area put in use under different heads at the end of year	Particulars Area under Mining Overburden/ Waste dumping Mineral Storage Area Occupied Infrastructure, plants, buildings, roads etc	Total Area(Ha) at the end of Plan period 66.204 15.35 15.905	Particulars Area under Mining Overburden/ Waste dumping Mineral Storage Area Occupied Infrastructure, plants, buildings, roads etc	Total Area(Ha) at the end of FY 2022-23 48.31 16.24 11 6.96	Subsequently modified MP approved on 19.04.2023.
3p	Production of ROM mineral during last five-years period, as applicable	2020-21: 998,0 2021-22: 998,0 2022-23: 998,0 2023-24: 998,0	000 000	2020-21: 798 2021-22: 997 2022-23: 997 2023-24: 961 Feb-24)	,140 ,550	Unit: In tonnes; Date of opening of mine on 25.07.2020
3q	applicable General remarks of inspecting Officer on method of mining etc		is being carr ML expired premium modification AMP on 19.0	ried . It is an a on 31/3/2020 of 150 % s have been n	nade in earlier ntly, the mining	

4)Solid Waste Management-Dumping:--

SL.No	Item	Proposals (FY 2022-23)	Actual work	Remarks
4a	Separate dumping of topsoil, OB & mineral reject	No Topsoil ; Separate Dumping OB wastes and stacking of Mineral reject proposed.	As per proposals.	
4b	Location of topsoil, OB & mineral reject dumps	Top soil generation –Nil Mineral reject- At proposed mineral rejects stock No 1&2 and utilized by blending. Proposed waste dump-1 E336215-336410 N2424580-2424590 Proposed waste dump-2 E335340-335490 N2424550-2424640	Dumping of OB/waste is being dumped in Dump-2 (that previously dump-4& dump-2) and parts of waste are dumped as Backfilling in BF-1 (335541E-335288E & 2424525N- 2424369N) (i.e. exhausted part of pits). Mineral rejects stacking and utilized as per the proposals. Subsequently modified MP approved on 19.04.2023.	
4c	Number of dumps within lease area and outside lease area	Three nos dumps within the lease area.	Three nos dump within the lease area.	
4d	Location of dumps w.r.t. ultimate pit limit	Outside of UPL (South western and eastern part of ML)	As per the proposals.	
4e	Number of active & alive dumps	Two active dumps only.	One active Dump and backfilling at BF-1 at exhausted part of pits. Subsequently modified MP approved on 19.04.2023	_
4f	Number of dead dumps	One	Two ; Subsequently modified MP approved on 19.04.2023	
4g	Number of dumps stabilished	NIL	one	
4h	Whether	Yes; Retaining wall or	Constructed 688 m Retaining	

	Retaining wall or garland drain all along dumps are there	garland drain all along dump.	wall &garland drains all along dumps.	
4i	Length of Retaining wall or garland drain all along dump	Maintenance of Retaining Wall & Garland drain	Maintenance as per the proposals. Besides Retaining Wall of 180 mtr constructed.	
4j	Number of settling ponds	Nil	Maintenance of Existing Settling Ponds	
4k	Specific comments of inspecting Officer on waste dump managemen t	been proper due to non-deve	rt of Overburden Wastes Dump Nelopment of terraces to reduce the omeasures to prevent the escape ion. Violation pointed out.	dump height

5)Solid Waste Management-Backfilling:--

SL.No	Item	Proposals (FY 2022-23)	Actual work	Remarks
5a	Status on part or full extraction of mineral from mined out area before starting backfilling	No such proposals.	After exploration, it is found that pits nos Q-6 & Q-9 were barren (Mined –out area).	
5b	Area under backfilling of mined out area	No such proposals.	7.58Ha. Subsequently modified MP approved on 19.04.2023 with back-filling proposals.	
5c	Concurrent use of topsoil for restoration or rehabilitation of mined out area	NA	NIL	
5d	Total area fully reclaimed & rehabilitated	NA	NIL	
5e	General remarks of inspecting Officer on backfilling and reclamation etc	After exploration, it is found that pits nos Q-6 & Q-9 were barren. Subsequently modified MP approved on 19.04.2023 with back-filling proposals. As on date of inspection, it is reported that 15.56 Ha area back-filled as per the modified approved proposals.		

6)Progressive Mine Closure Plan:---

SL.N.	Item	Proposals (FY 2022-23)	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly - Rule 26(2). (Hard copy same provided)	Before 1 st July 2023	Submitted on time	NIL
6b	Management of worked/ mined out benches/dumps i) Area available for rehabilitation (ha) ii) Afforestation done (ha) iii) No. of saplings planted during the year iv) Cumulative no. of plants v) Any other specific method of rehabilitation vi) Cost incurred on watch & care during the year	i)NA ii) 0.625 Ha iii) 2,000 nos iv) 9,000 nos v)Plantation vi) Rs 30,000	i)Nil ii) 1.5Ha(Dump terrace, on barren land, gap plantation) iii)4,412 nos iv) 15,002nos v) Plantation vi) Rs 62,000	NIL
6c	Compliance on reclamation and rehabilitation by backfilling i) Voids available for backfilling (L X B X D) ii) Void filled by waste/tailings iii) Afforestation on the backfilled area iv) Rehabilitation by making water reservoir v) Any other specific means	i)NIL ii) NIL iii)NIL iv)NIL v)NIL	i) 7.58Ha ii) 7.58Ha iii)NIL iv)NIL v)NIL	After exploration, it is found that pits nos Q-6 & Q-9 were barren. Subsequently modified MP approved on 19.04.2023 with backfilling proposals.
6d	Compliance of Rehabilitation of waste land within lease i) Afforestation ii) Area rehabilitated (ha) iii) Method of rehabilitation	i)NIL ii)Nil iii)Nil	i)NIL ii)Nil iii)Nil	NIL
6е	Compliance of Environmental monitoring (core zone & buffer zone)	Environmental monitoring in Core zone and buffer zone will be as per MOEF	Environmental monitoring in Core zone and buffer zone was carried out as per the proposals	NIL

		and SPCB	and parameters are	
		guidelines.	within the limit.	
6f	General remarks of	Lessee has impl	ementing PMCP pro	oposals as per
	inspecting Officer on	approved MP. Afte	er exploration, it is fou	and that pits nos.
	PMCP compliance &	Q-6 & Q-9 were	barren. Subsequently	y modified MP
	progressive closure	approved on 19.04	2023 with back-filling	proposals. As on
	operation etc	date of inspection,	it is reported that 15.5	66 Ha area back-
	_	filled as per the mo	dified approved propos	als.

7) Mineral Conservation:---

SL.No	Item	Proposals ((FY 2022-23)	Actual work	Remark	
7a	ROM Mineral dispatch or grade-wise sorting within lease area	Grade wise sorting to Fines & CLO by crushing and screening within lease area.	As per proposals	s NIL	
7b	Method of grade-wise mineral sorting i.e. manual or mechanica l	Mechanical	Mechanical	NIL	
7c	Different grade of mineral sorted out at mines	Iron Ore of different size (Fines & CLO) and Grade wise sorting and dispatched (Fine Iron Grade range- 45 to below 55 % Fe, 51- below 55% Fe, 55-below 58% Fe, 58-below 60% Fe,) and CLO	As per proposals		
7d	Any beneficiation process at mines	None Except dry crushing & screening	As per proposals.	NIL	
7e	General remarks of inspecting Officer on mineral conservation & beneficiation issues	Grade-wise soring to fines/CLO & dispatches of ore/mineral as per the proposals and generally low grade deposit in the mine. Wet screening and Jigging proposed in modified MP and not yet started. Further, lumps and fines ratio also modified to 20:80 at approved in modified MP.			

8)Environment:--

SL.No.	Item	Proposals (FY 2022-23)	Actual work	Remarks
8a	Separate removal and utilization of topsoil	No such proposals.	Nil	
8b	Concurrent use or storage of topsoil	No such proposals.	Nil	Nil
8c	Separate dumps for overburden, waste rock, rejects and fines	OB Waste from pit nos Q-1, 2 and 5 will be disposed of at proposed waste	Dumping of OB waste in Dump-2 and part of waste are dumped as Backfilling in BF-1	Subsequently modified MP approved on 19.04.2023 with back-

0.4	Use of overburden, waste	dump-1 and waste to be generated from pits nos Q-6 &9 will be disposed at proposed waste dump-2. No such	(i.e. Exhausted part of pits) 7.58Ha. area	filling proposals.
8d	rock, rejects and fines dumps for restoring the land to its original use	proposals	backfilled. Subsequently modified MP approved on 19.04.2023 with back-filling proposals.	IVII
8e	Phased restoration, reclamation and rehabilitation of lands affected by mining operations (Pits, dumps etc)	No such proposals	7.58Ha. Subsequently modified MP approved on 19.04.2023 with back-filling proposals.	Nil
8f	Baseline information on existence of plantation & additional plantation done	2000 nos sapling plantation proposals during FY 22-23.	4412 nos saplings planted in 1.5 Ha area during year 22-23 with cumulative 15,002 nos of saplings.	
8g 8h	Survival rate Water sprinkling on roads to control airborne dust	Regular sprinkling of water on Haul roads, crushing & screening plant site and dump location etc using Water tanker to suppress the dust.	99 % Carried out as per the proposals.	
8i	General remarks of inspecting Officer on aesthetic beauty in & around mines area.	Aesthetic beauty in & around mines area is good as lessee implementing the PMCP proposal and carried out plantation as per the proposals.		

9)Compliance of Rule 45

SL.No.	Item	COMMENTS	
			Remarks.
9a	Status of submission	Regularly submitting the MRs/ARs on-time.	Nil
	of Monthly and	However, the lessee had submitted April-2023 MR on	
	Annual returns	10/5/2023 and violation pointed out for delay in	
		submission of MR.	

S.N.	Item	Details GIVEN	in A.R.	Actual in field	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager	Mines Manager: Shri S.K. Panda Mining Engineer: Shri Sanjaya kumar Prusty Geologist: Shri Pritam Keshari Patra		Actual also the same.	
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	 Covered under current (O/C) Workings- 48.31 Ha Used for Waste Disposal- 16.24 Ha Reclaimed area: 7.58 Ha Occupied by plant, buildings, residential, welfare, buildings and roads- 6.96 Ha Other Purpose (including SZ & private land)- 10.45 Ha 		Actual also as per AR.	
9d	Scrutiny of Annual return on afforestation	4,412 nos		Actual also as per AR	
9e	Scrutiny of Annual return on mineral reject generation (Grade & quantity)	During year-22- Iron Unprocessed Ore (45-55 % Fe) Iron Processed Ore (45-55 % Fe)	NIL NIL	Information furnished not matching with actual.	Violation pointed out.
9f	Scrutiny of Annual return on ROM stock and/or graded	As on 31.03.202 Stock Iron ROM		Appear to be correct.	
	ore	Fines closir toni	9 1		
		45%- below 51 % Fe 51%- below 55 % Fe	70 12,807		
		55%- below 58%Fe	879		
		58%- below 60%Fe	12,004		
		60%- below 62%	NIL		
		CLO stock	in tonnes		
		(clo any size)	81,011		
9g	Scrutiny of Annual		Cost of production: Rs-1200		V/L
	return on sale value,	per tonne;		and ex-mine price	issued
	Ex. Mine price &	Ex-mine price:		were not matching	
	production cost	Ex-mine Price of Iron ore		as captive mine	
		Lumps in Rs per tonne 51%- below 1180.15		and auctioned mine of 150 % bid	
		3170- Delow	1180.15	01 130 % DIU	

		55% Fe		premium.	
		Ex-mine Price	Ex-mine Price of Iron ore		
		Fines in Rs	per tonne		
		45%- below 51 % Fe	582.37		
		51%- below55% Fe	874.98		
		55%- below 58%Fe	880		
		58%- below 60%Fe	1050		
		Ex-mine Price	e for CLO		
		in Rs per	r tonne		
		<62% Fe			
		(clo any	1180.15		
		size)			
9i	Scrutiny of Annual	Fixed Value of A	Assets: Rs	Appear to be	
	return on fixed	105,65,51,145		correct.	
	assets				
9k	Scrutiny of Annual	Back Hoe: 9 nos		Observed to be	
	return on mining	Blast Hole Drill:	·	correct.	
	machineries	Rock drill: 3 nos			
		Wheel Loader:3 nos;			
			Dumpers (35 T):35 nos;		
			Crusher: 1nos;		
		Generator: 4 nos;			
		pumps: 4 nos			

(10) Violation observed during current inspection and compliance position of earlier violation pointed out:

- (a)Compliance position of earlier violation pointed out: Earlier, inspection of mine was carried out on 22/10/2022. As per records, there is no outstanding violation.
- (b)During current inspection: The violation of Rules 37(2), 45(5)(b) and 45(7) of MCDR 2017 have been observed and the violation letter issued on 18/04/2024.
- (11) On-line validation of star rating of templates submitted under rule 35 (FY-2022-23) has been made on 19/3/24 for four star at RO level.
- (12)The lessee was submitted DAI/drone survey data under rule 34A for FY 22-23 on 27/6/2023.

Date: 18/04/2024

(Prashant S. Hegde) Regional Mining Geologist